

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

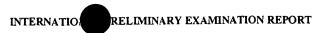
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)		
062002-2690 International application No.	International filing date (day/mor	nth/year) Priority date (day/month/year)		
	19 June 2003 (19.06.2003)	19 June 2002 (19.06.2002)		
PCT/US03/19290 International Patent Classification (IPC)	or national classification and IPC	19 June 2002 (19.00-2002)		
		103		
IPC(7): B01D 53/04, 53/62 and US Cl.: Applicant	93/96.139,900, 423/230, 302/30,	103		
	ND 4 TION			
GEORGIA TECH RESEARCH CORPO	JRATION			
Examining Authority and	1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.			
2. This REPORT consists of	a total of sheets, including	this cover sheet.		
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).				
These annexes consist of	a total of L sheets.			
3. This report contains indic	ations relating to the following	items:		
I Basis of the rep	port			
II Priority				
III Non-establishm	Non-establishment of report with regard to novelty, inventive step and industrial applicability			
IV Lack of unity of invention				
	The important of the im			
applicability; citations and explanations supporting such statement				
VI Certain docum				
VII Certain defects	VII Certain defects in the international application			
VIII Certain observ				
Date of submission of the demand	Date	e of completion of this report		
06 January 2004 (06.01.2004)	29 J	une 2004 (29.06.2004)		
Name and mailing address of the IPEA	/US Aut	norized officer		
Mail Stop PCT, Attn: IPEA/US Commissioner for Patents	Rol	pert H. Spitzer Jean Proceed		
P.O. Box 1450 Alexandria, Virginia 22313-1450		phone No. (571) 272-0987		
Facsimile No. (703) 305-3230	1616	priorie 110. (511) 212 070.		

Form PCT/IPEA/409 (cover sheet)(July 1998)

Interpal a	oplication No.	
PCT//192	290	

I.	Basis of the report				
1.	With regard to the elements of the international application:*				
	the international application as originally filed.				
	the description:				
	pages NONE as originally filed				
	pages NONE , filed with the demand				
	pages 1-21 , filed with the letter of 20 May 2004 (20.05.2004)				
	the claims:				
	pages NONE , as originally filed pages NONE , as amended (together with any statement) under Article 19				
	pages NONE, as amended (together with any statement) under Article 19 pages NONE, filed with the demand				
	pages 22-27 , filed with the letter of 20 May 2004 (20.05.2004)				
	the drawings:				
	pages 1 as originally filed				
	pages NONE, filed with the demand				
	pages NONE , filed with the letter of				
	the sequence listing part of the description:				
	pages NONE , as originally filed pages NONE , filed with the demand				
	pages NONE , filed with the definant pages NONE , filed with the letter of				
2.	With regard to the language, all the elements marked above were available or furnished to this Authority in the				
	language in which the international application was filed, unless otherwise indicated under this item.				
	These elements were available or furnished to this Authority in the following language which is:				
	the language of a translation furnished for the purposes of international search (under Rule23.1(b)).				
	the language of publication of the international application (under Rule 48.3(b)).				
	the language of the translation furnished for the purposes of international preliminary examination(under Rules				
	55.2 and/or 55.3).				
3.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:				
	contained in the international application in printed form.				
	filed together with the international application in computer readable form.				
	furnished subsequently to this Authority in written form.				
	furnished subsequently to this Authority in computer readable form.				
	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the				
	international application as filed has been furnished.				
	The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.				
4.	The amendments have resulted in the cancellation of:				
	the description, pages NONE				
	the claims, Nos. NONE				
	the drawings, sheets/fig NONE				
5.					
	beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)). **				
thi	* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). ** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.				



	application No. 9290	
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. STATEMENT			
Novelty (N)	Claims	1.32	YES
Novelly (N)		NONE	NO
Inventive Step (IS)	Claims		YES NO
	Claims	NONE	
Industrial Applicability (IA)	Claims	1-32	YES
	Claims	NONE	NO

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Interpretable application No.	
PCT 3/19290	

VII. Certain defects in the international application				
The following defects in the form or contents of the international application have been noted:				
	1			

Form PCT/IPEA/409 (Box VII) (July 1998)